

1 REMARKS

2 Status of the Claims

3 Claims 1 - 8 and 10 - 33 remain pending in the present application. Claim 13 has been amended
4 only to correct a grammatical error.

5 Claims Rejected Under USC § 103(a)

6 The Examiner has rejected Claims 1, 3, 15-16, 24-25, 27-28, and 29-31 under 35 USC § 103(a)
7 as being obvious over Corel WordPerfect 6.1, 1996 (hereinafter, "WordPerfect"), in view of
8 Moseberger, D., "The Sane Scanner Interface" (Linux Journal, Issue 47, 3/1998, pp. 1-12, hereinafter
9 "the Sane reference"). Claims 2, 6, 10, 12, and 17 were rejected under 35 USC § 103(a) as being
10 obvious over WordPerfect, in view of the Sane reference, and further in view of "Ulead PhotoImpact
11 3.0," User Guide for Windows 95 and Windows NT 3.51, 1996, pp. 104-107, 111-114, and 162-167
12 (hereinafter, "Photoimpact"). Claims 4-5, 18, 21-23, and 32-33 were rejected under 35 USC § 103(a)
13 as being obvious over WordPerfect, in view of the Sane reference, and further in view of U.S. Patent
14 No. 5,907,665 (Sobol et al, hereinafter, "Sobol"). Claims 7-8, 11, and 13-14 were rejected under 35
15 U.S.C. 103(a) as being unpatentable over WordPerfect, in view of the Sane reference, and further in
16 view of one or more of the following: "Mastering Photoshop 5 for the Web," 1998, pp. 1-10;
17 "Troubleshooting and configuring the Windows NT/95 Registry," Clayton Johnson, 1997, pp. 1-2;
18 TWAIN specification version 1.8, 10/22/98; U.S. Patent No. 5,845,076 (Arakawa); the Sobol patent;
19 and U.S. Patent No. 6,154,756 (Hearn). Applicants respectfully disagree that the references disclose all
20 of the steps or elements of the recitation in these claims for at least the reasons set forth below.

21 In the interest of reducing the complexity of the issues for the Examiner to consider in this
22 response, the following discussion focuses on independent Claims 1, 18, and 24. The patentability of
23 each remaining dependent claim is not necessarily separately addressed in detail. However, applicants'
24 decision not to discuss the differences between the cited art and each dependent claim should not be
25 considered as an admission that applicants concur with the Examiner's conclusion that these dependent
26 claims are not patentable over the disclosure in the cited references. Similarly, applicants' decision not
27 to discuss differences between the prior art and every claim element, or every comment made by the
28 Examiner, should not be considered as an admission that applicants concur with the Examiner's
29 interpretation and assertions regarding those claims. Indeed, applicants believe that all of the dependent
30 claims are patentable over the cited references. Moreover, a specific traverse of the rejection of each

1 dependent claim is not required, since dependent claims are patentable for at least the same reasons as
2 the independent claims from which the dependent claims ultimately depend.

3 Discussion of the Sane Reference:

4 SANE is an interface that enables application programs to acquire images from scanning
5 devices through a simple, standardized interface. (See the Sane reference, "Abstract.") Implementation
6 of SANE requires a frontend application and a backend driver. The frontend application, such as a
7 word processor, uses SANE to acquire images from scanning devices. The SANE backend driver
8 directly controls the scanning device using that device's particular communication protocol, insulating
9 the frontend application from device specific details. (See [http://www.sane-](http://www.sane-project.org/man/sane.7.html)
10 [project.org/man/sane.7.html](http://www.sane-project.org/man/sane.7.html), "Terminology.") SANE was designed as an alternative to TWAIN, the
11 industry standard scanning device interface, because TWAIN requires that the driver run on the same
12 computer and in the same process as the frontend application. TWAIN also requires the scanner driver
13 contain code for executing a graphical user interface enabled to control the scanner. These
14 requirements make controlling the scanner over a network "unsuitable". (See the Sane reference,
15 "Introduction.") SANE provides a universal interface for operation of image scanning devices that
16 does not require embedding a graphical user interface into the SANE driver, and displaying the
17 graphical user interface in the frontend application. (See the Sane reference, "Introduction.")

18 However, SANE does not teach or suggest a SANE interface to a scanner implemented by
19 interfacing SANE API calls with a TWAIN driver. Therefore, SANE does not teach or suggest "using
20 a special API module accessed from within an application program for interfacing the application
21 program with a TWAIN module" as recited in Claim 1. Neither SANE nor any of the other cited prior
22 art provides any teaching or suggestion that would lead one of ordinary skill in the art to modify a
23 TWAIN module to provide the functionality of SANE.

24 Discussion of Implementing SANE using TWAIN

25 TWAIN is a widely adopted standard; nearly all scanning devices designed for use with a
26 personal computer support TWAIN. SANE, by contrast, is much less common. If someone were able
27 to create a SANE driver that used any TWAIN compliant driver as a backend, the SANE interface
28 would automatically be supported by all TWAIN supported devices. However, no one has
29 implemented SANE by interfacing SANE API calls with a TWAIN driver as required to achieve the
30 SANE functionality, despite the obvious benefits. Moreover, the SANE project creators, authors, and

1 maintainers explicitly teach away from building a SANE driver that utilizes a TWAIN driver as a
2 backend, stating specifically that:

3 “If you're familiar with TWAIN, you may wonder why there is a need for *SANE*. Simply
4 put, TWAIN does not separate the user-interface from the driver of a device. This,
5 unfortunately, makes it difficult, if not impossible, to provide network transparent access to
6 image acquisition devices (which is useful if you have a LAN full of machines, but scanners
7 connected to only one or two machines; it's obviously also useful for remote-controlled cameras
8 and such). It also means that any particular TWAIN driver is pretty much married to a particular
9 GUI API (be it Win32 or the Mac API). In contrast, *SANE* cleanly separates device controls
10 from their representation in a user-interface. As a result, *SANE* has no difficulty supporting
11 command-line driven interfaces or network-transparent scanning. **For these reasons, it is
12 unlikely that there will ever be a *SANE backend* that can talk to a TWAIN driver.**”(See
13 <http://www.sane-project.org/intro.html>, last paragraph – emphasis added.)

14 This statement was last updated on September 23, 2003, indicating that more than five years
15 after the introduction of SANE, and more than four years after the present application was filed, the
16 creators, authors, and maintainers of SANE still believed that building a SANE driver on top of a
17 TWAIN driver was not feasible. Applicants thus find it hard to understand why one of ordinary skill in
18 the art could possibly have been lead to make the combination proposed by the Examiner. If the very
19 authors of one of the cited references teach away from that combination, there is clearly no basis
20 justifying the rejection of applicants’ claims as obvious over the combination.

21 In addition to this statement by authors of the SANE project, all applications built to integrate
22 SANE with TWAIN mentioned on the SANE FAQ Web page (see [http://www.sane-project.org/sane-](http://www.sane-project.org/sane-frontends.html)
23 [frontends.html](http://www.sane-project.org/sane-frontends.html)) implement a TWAIN driver by interfacing with a SANE driver for a SANE scanner.
24 Specifically, “SaneTwain,” “twain-to-sane-bridge,” “TWAIN SANE Interface for Mac OS X,”
25 “WinSANE,” and more, all allow applications to access a SANE scanner through a TWAIN interface
26 by forwarding TWAIN API calls to a SANE driver. There are no applications in the prior art that teach
27 exposing SANE to a user by interfacing a SANE driver with a TWAIN driver. In other words, the
28 combination required to achieve applicants’ claimed approach has never been implemented in any
29 applications that employ SANE.

30 Discussion of WordPerfect

WordPerfect 6.1 is a word processing application that supports integrated TWAIN scanning
functionality. WordPerfect directly accesses the TWAIN module. There is no distinct API module
used by WordPerfect for interfacing with the TWAIN module. The interface presented to the user is

1 the interface encoded in the TWAIN module, and the user is not isolated from the TWAIN interface by
2 using a special API to provide the user interface presented to the user. Specifically, the reference noted
3 states: “Consult your scanner software documentation for instructions on manipulating the image and
4 *pasting* it to WordPerfect.” (See WordPerfect 6.1, 1996, “Scan Images Into WordPerfect” – emphasis
5 added.)

6 WordPerfect 6.1 thus does not teach using a special API module accessed from within an
7 application program for interfacing the application program with a TWAIN module, as required by
8 applicants’ claim recitation, and in view of the teaching of the authors of the SANE reference, it would
9 not be obvious to modify TWAIN or WordPerfect to achieve what applicants have recited in their
10 claims.

11 Discussion of Independent Claim 1

12 The Examiner has asserted that it would be obvious to one of ordinary skill in the art to combine
13 the teachings of WordPerfect and the Sane reference to separate the TWAIN module from interacting
14 directly with the user. As discussed above, neither the Sane reference nor WordPerfect teach or suggest
15 a special API module accessed from within an application program for interfacing the application
16 program with a TWAIN module. Even assuming, *arguendo*, that there existed a motivation to combine
17 WordPerfect and the Sane reference, the combination of WordPerfect and the Sane reference still does
18 not provided for separating the TWAIN module from interacting directly with the user, because the
19 combination of WordPerfect and the Sane reference does not teach a standardized scanner interface
20 such as SANE implemented by interfacing with existing TWAIN drivers. The Examiner has rejected
21 Claim 1 by combining a prior art reference that teaches a special API scanning module (i.e., SANE)
22 and a prior art reference that teaches integrated TWAIN scanning capability; however, neither prior art
23 reference or the combination of prior art references teach a special API scanning module that interfaces
24 with a TWAIN module. Claim 1 recites: “using a special application programming interface (API)
25 module accessed from within the application program, for interfacing the application program with a
26 TWAIN module that is used for acquiring an image with the image source device that is active, the
27 special API module being entirely separate and distinct from the TWAIN module.” Claim 1 thus
28 explicitly recites a special API module for interfacing the application program with a TWAIN module.
29 Therefore, neither WordPerfect, the Sane reference, nor the combination of WordPerfect and SANE
30 teach the elements recited in Claim 1.

1 It would not have been obvious to a person of ordinary skill in the art to combine the teachings
2 of WordPerfect and SANE to separate the TWAIN module from interacting directly with the user. As
3 discussed above, authors of the SANE project explicitly teach away from implementing a SANE
4 backend by interfacing with a TWAIN module. Because the authors of the SANE project teach away
5 from a modification of SANE corresponding to applicants' claimed method, it would not be obvious to
6 a person of ordinary skill in the art to combine the teachings of WordPerfect and SANE, to separate the
7 TWAIN module from interacting directly with the user. Accordingly, the rejection of Claim 1 should
8 be withdrawn.

9 Because dependent claims are considered to include all of the elements of the independent
10 claims from which the dependent claims ultimately depend and because the cited art does not disclose
11 or suggest all of the elements of independent Claim 1, the rejection of dependent Claims 2-8 and 10-17
12 under 35 U.S.C. § 103(a) should be withdrawn for at least the same reasons as discussed above in
13 connection with applicants' traverse of the rejection of Claim 1.

14 Discussion of Independent Claim 18

15 Claim 18 recites "enabling an image source device user interface provided by a special
16 application programming interface module from within an application program used to create a text
17 content of the document, ... wherein the special API (SAPI) module is entirely separate and distinct
18 from a TWAIN module and interacts with the TWAIN module to control the image source device, and
19 wherein the image source device user interface provides a selection scheme that is independent of the
20 TWAIN module within the application program for selecting a plurality of the images stored in the
21 image source device for insertion into the document." The Examiner asserts that the SAPI interface
22 allows the application to direct the acquisition of an image through a "Source Manager" which contacts
23 a "Source Driver," and that this interaction teaches an SAPI module entirely separate and distinct from
24 a TWAIN module. Applicants respectfully submit that both the "Source Manager" and the "Source
25 Driver" are components of the TWAIN module, and therefore cannot be *independent* of the TWAIN
26 module.

27 Claim 18 recites "wherein the special API module is entirely separate and distinct from a
28 TWAIN module and interacts with the TWAIN module to control the image source device." Claim 18
29 thus clearly recites an API module "entirely separate and distinct from a TWAIN module;" the presence
30 of multiple components within a particular TWAIN module simply does not teach a second

1 independent module that is capable of interacting with the TWAIN module to control an image source
2 device (e.g., a scanner). In addition, the same argument made in regard to the traverse of Claim 1 also
3 applies in traversing the rejection of Claim 18. Accordingly, the rejection of Claim 18 is unjustified
4 and should be withdrawn.

5 Because dependent claims are considered to include all of the elements of the independent
6 claims from which the dependent claims ultimately depend and because the cited references do not
7 teach or suggest all of the steps of independent Claim 18, the rejection of dependent Claims 19-23
8 under 35 U.S.C. § 103(a) should also be withdrawn for at least the same reasons as the rejection of
9 Claim 18.

10 Discussion of Independent Claim 24

11 Claim 24 recites “an interface module comprising a special application programming interface
12 (API) module defined by computer-executable instructions stored in the memory, the special API
13 module being entirely separate and distinct from the source manager module and serving as an interface
14 with the source manager module and under control of the application program.” In addition, Claim 24
15 recites some of the same novel and non-obvious elements as recited in Claim 1, for the reasons noted
16 above, and also distinguishes over the cited art for the same reasons as indicated in the traverse of the
17 rejection of Claim 18. Therefore, Claim 24 should be allowed for the same reasons as Claims 1 and 18.

18 Because dependent claims are considered to include all of the elements of the independent
19 claims from which the dependent claims ultimately depend and because the cited art does not disclose
20 or suggest all of the elements of independent Claim 24, the rejection of dependent Claims 25 - 33 under
21 35 U.S.C. § 103(a) should be withdrawn for at least the same reasons as the rejection of Claim 24.

22 Based upon the comments made above, it should be evident that all claims in the present
23 application are patentable. Accordingly, the application should be passed to issue without further delay.
24 If any issues remain, the Examiner is invited to telephone applicants’ attorney at the number listed
25 below.

26 Respectfully submitted,

27
28 /ron anderson/
29 Ronald M. Anderson
30 Registration No. 28,829

RMA/DWF:elm